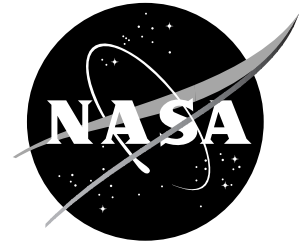


NewsRelease

National Aeronautics and
Space Administration

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For Release: August 16, 2001

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RELEASE NO. 01-089

NASA Langley participates in 2001 Hurricane Study

The height of the hurricane season is here, and NASA Langley researchers are looking for the next big storm.

Langley scientists are taking part in the fourth Convection and Moisture Experiment (CAMEX-4) based out of Naval Air Station, Jacksonville, Fla., through September. On board specially instrumented aircraft, researchers will fly in and around hurricanes approaching the East Coast and Gulf regions of the United States. They will combine their storm data with readings from other ground and orbiting satellite instruments to get a better understanding of tropical cyclones. This should provide meteorologists and other researchers with information to help improve hurricane predictions that may decrease coastal evacuations and increase warning time.

During CAMEX, Langley's Lidar Atmospheric Sensing Experiment (LASE) system will use laser light pulses to measure water vapor, clouds, and aerosols. It will compare the absorption and scattering of different laser pulses creating an atmospheric map of the hurricane area above and below the aircraft.

"We are going to further investigate the characteristics of hurricanes and what type of importance our remote sensing instrument has on hurricane forecasts," said Ed Browell, Langley researcher and LASE team leader. "LASE will help define the energy source for hurricanes by better understanding how much moisture is flowing into it."

LASE will fly aboard NASA's DC-8. Other research aircraft involved in the mission include the high-flying NASA ER-2 and the remotely piloted Aerosonde aircraft. CAMEX-4 is the latest in a series of field research investigations sponsored by the Earth Sciences Enterprise at NASA Headquarters in Washington, D.C. It unites researchers from 10 universities, five NASA centers and the National Oceanic and Atmospheric Administration (NOAA).

After CAMEX, LASE scientists plan to participate in the International Water Vapor Project, a field campaign to understand the development of clouds and improve rainfall forecasts. This experiment, led by the National Center for Atmospheric Research, will be conducted over the Southern Great Plains of Oklahoma during the spring of 2002.

The CAMEX hurricane study is part of NASA's Earth Science Enterprise, a long-term research program dedicated to better understanding the total Earth system and the effects of natural and human-induced changes on our global environment.

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